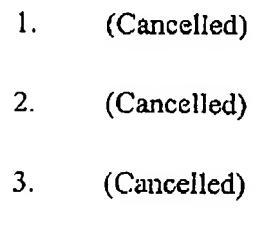
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:





4. (Cancelled)

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5. (Cancelled)
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6. (Cancelled)

7. (Cancelled).

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended): An integrated pressure control system for planarizing a workpiece comprising:

a multizone workpiece carrier having a plurality of pressurizable zones;

a pressure control system mounted to said carrier for controlling pressure provided to said plurality of pressurizable zones; and

a rotary union mounted on said carrier for connecting electrical lines to said pressure control system.

- 16. (Previously Presented): The integrated pressure control system of claim 15 further comprising an automatic calibration system for calibrating said pressure control system.
- 17. (Previously Presented): The integrated pressure control system of claim 15 wherein said pressure control system comprises at least one pressure transducer.
- 18. (Previously Presented): The integrated pressure control system of claim 17 wherein said pressure control system further comprises at least one valve.
- 19. (Previously Presented): The integrated pressure control system of claim 15 wherein said rotary union further connects an air supply line and an air exhaust line to said pressure control system.
- 20. (Previously Presented): A workpiece carrier comprising: a carrier housing;
- a workpiece bladder coupled to said housing, said workpiece bladder having a surface configured to press against a surface of a workpiece;
- at least one pressure transducer mounted to said carrier housing for controlling pressure provided to said workpiece bladder; and
- a rotary union mounted to said carrier for connecting said at least one pressure transducer with a control board.
- 21. (Previously Presented): The workpiece carrier of claim 20 wherein said bladder comprises a plurality of pressurizable zones and each zone has a pressure transducer for monitoring pressure to that zone.
- 22. (Previously Presented): The workpiece carrier of claim 20 further comprising at least one valve mounted to said carrier.
- 23. (Previously Presented): The workpiece carrier of claim 20 wherein said control board is mounted to the carrier.

- 24. (Cancelled)
- 25. (New): An integrated pressure control system for planarizing a workpiece comprising: a multi-zone workpiece carrier having a plurality of pressurizable zones; a multi-port electric rotary union mounted to a top of the multi-zone workpiece carrier; a multi-port pneumatic rotary union mounted to the top of the multi-zone workpiece carrier; and
 - a control board for controlling the multi-port electric rotary union.